MINUTES OF THE OUTER CONTINENTAL SHELF (OCS) SCIENTIFIC COMMITTEE (SC) MEETING

May 22-24, 2007

New Orleans, Louisiana

Proceedings

Tuesday, May 22

Welcome and Introductions

The meeting began with a brief welcome from the Chair, Dr. Robert Diaz and Mr. James Cimato, Acting Chief of the Environmental Sciences Branch and Executive Secretary of the OCS SC.

MMS Director's Presentation and Discussion with the Committee

The OCS SC held its annual plenary meeting May 22 through 24, 2007, in New Orleans, Louisiana. As advisor to the Director, Minerals Management Service (MMS), the Committee appreciates the opportunity to have a dialogue with the Director on ongoing and future issues, policies, and activities of the Bureau. This exchange not only keeps the Committee apprised of MMS direction but also offers an opportunity for the Committee to provide direct advice and guidance on matters as they relate to the Environmental Studies Program.

Mr. Robert LaBelle, Deputy Associate Director, Offshore Minerals Management, represented the Director and reported on and discussed with the Committee the status of the MMS and associated issues. This was followed by a series of informational presentations.

Gulf of Mexico OCS Region Update

Mr. Joseph Christopher, Regional Supervisor, Office of Leasing and Environment, Gulf of Mexico OCS Region, gave the Committee an update on the activities of the Gulf Region.

Alternate Energy Update

The growing cost of conventional energy resources and the need to diversify our Nation's energy portfolio has spurred an increased interest in renewable energy development on federal lands both onshore and offshore. Section 388 of the Energy Policy Act of 2005 (EPAct) amended the OCS Lands Act, and granted the Department discretionary authority to grant leases, easements or rights-of-way for activities on the OCS that produce or support production, transportation, or transmission of energy from sources other than oil and gas. Simply put, the new authorities under the EPAct gave the Department the ability to explore the future development of promising new ocean energy sources in the OCS such as wind, wave, ocean current, and solar energy. Additionally, the Department was given the authority to grant leases, easements, or rights-of-way for other OCS activities that make alternate use of existing OCS facilities. Ms. Maureen Bornholdt presented an update to the Committee on where MMS is with its OCS Alternative Energy and Alternate Use Program.

Subcommittee on Alternative and Renewable Energy (SCARE)

Dr. Michael Fry, Chair of the OCS SC SCARE, gave an update on alternative and renewable energy efforts within MMS and within the Subcommittee. The Subcommittee on was formed at the 2006 meeting, and members have individually received two documents for review and comment: 1) The MMS Draft Programmatic Environmental Impact Statement for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf; March 2007; and 2) a literature review prepared under contract entitled *Worldwide Synthesis and Analysis of Existing Information Regarding Environmental Effects of Alternative Energy Uses on the Outer Continental Shelf, Review Draft, April 2007*. Subcommittee members

had reviewed and commented on each of these reports, and Dr. Fry presented an update to the full Committee in New Orleans. The Subcommittee had also consulted with the Environmental Studies Program (ESP) staff on a possible review of documents pertaining to the Cape Wind project offshore from Massachusetts, although details of the review have not been finalized.

Report from the last OCS Policy Committee Meeting

Dr. Victor Carrillo, Chair of the OCS Policy Committee, presented a summary of their last meeting, discussed how the Policy Committee operates, and welcomed interactions between the two OCS Committees.

Overview of the Gulf of Mexico Alliance

Dr. Byron Griffith, Director of the Environmental Protection Agency's Gulf of Mexico Program, gave a detailed overview of the Gulf of Mexico Program.

The Gulf of Mexico Alliance is a partnership, initiated in 2004, of the states of Alabama, Florida, Louisiana, Mississippi and Texas, intent on significantly increasing regional collaboration to enhance the ecological and economic health of the Gulf of Mexico. The Bush Administration's U.S. Ocean Action Plan recognizes the leadership that the five Gulf States have demonstrated in forming the Alliance and calls for the increased integration of resources, knowledge and expertise to address regional priorities.

The Alliance has identified five issues that are regionally significant and can be effectively addressed through increased collaboration at the local, state and federal levels. These priorities represent an initial focus for action through the Alliance:

- Water quality for healthy beaches and shellfish beds;
- Wetland and coastal conservation and restoration;
- Environmental education;
- Identification and characterization of Gulf habitats, and
- Reductions in nutrient inputs to coastal ecosystems.

In addition, the Gulf of Mexico Alliance serves as a forum for effective binational regional collaboration with the six Mexican Gulf States – Tamaulipas, Veracruz, Tabasco, Campeche, Yucatan and Quintana Roo.

Efforts to workout collaborative programs in advance

The ESP managers discussed the challenges and ongoing efforts at the national and regional levels to build collaborative programs which support the MMS mission.

Some Highlights of the MMS *Environmental Studies Program* and Our Goal for the Next Day-and-Half

The MMS Headquarters ESP presentation highlighted accomplishments during the past year and outlined the overall goals for the annual ESP study plan review.

Summary of Alaska Subcommittee Activities

The Subcommittee attended the Chukchi Offshore Monitoring in Drilling Area Planning (COMIDA) Workshop and the North Aleutian Basin (NAB) Planning Meeting in

November 2006. The purpose of the COMIDA workshop was to discuss and identify specific needs for monitoring of environmental effects of OCS Exploration and Development in the Chukchi Sea. The NAB planning meeting brought together scientific, agency, user, and public members to describe the major issues relative to possible lease sales in the NAB.

Dr. Michael Castellini, Associate Dean, School of Fisheries and Ocean Sciences, addressed the full Committee on the final products of both workshops and suggested recommendations from the Subcommittee.

Summary of Deepwater Subcommittee Activities

Deepwater Subcommittee members attended the 24th Information Transfer Meeting held in January 2007 in New Orleans. The Subcommittee held a follow-up discussion on the meeting presentations and prepared a brief report commenting on three aspects of the deepwater environmental studies program: 1) research on deepwater corals, 2) effects of deepwater oil and gas exploration on and development on the continental shelf, and 3) vessel resources for deepwater research. Dr. Joseph Smith, ExxonMobil Upstream Research Company, summarized the activities of the Deepwater Subcommittee.

Overview of the Coastal Marine Institute

The MMS Coastal Marine Institute (CMI) initiative was proposed in 1991 as an MMS-State partnership to strengthen relationships with coastal states where OCS oil and gas activities take place and to improve the information flow to the affected States and the public. It accomplishes this by using State institutions to conduct research on issues of concern to both the State and MMS. This research is focused on environmental and socioeconomic aspects of OCS oil and gas and marine mineral development activities. Through the CMI's, increasing numbers of students and faculty are engaging in OCS related research, developing new skills, and developing new information and approaches to solving management issues. Dr. Larry Rouse, Director of Louisiana State University's Coastal Marine Institute (CMI), outlined the work done for MMS under the CMI program with presentations by scientists on two current projects. Dr. Rouse introduced Dr. David Dismukes who gave an update on the Center for Energy Studies CMI Projects; Drs. Gregory Stone and Richard Condrey, who gave an update on the Environmental Investigation of Long-Term Use of Ship Shoal Sand Resources; Dr. Chunyan Li who gave a presentation on characterizations of the deep water flows under hurricane and non-hurricane conditions using oil platform ADCPs; and Dr. Mark Benfield, who gave a brief presentation on ecological relationships between platforms and pelagic fishes.

Proposed Final Program Outer Continental Shelf Oil and Gas Leasing Program 2007-2012 Mr. Christopher described the recently released 5-Year Outer Continental Shelf Oil and Gas Leasing Program, which will guide domestic energy leasing on the OCS from 2007 to 2012. The program proposes 21 lease sales in 8 planning areas. Twelve sales are slated for the Gulf of Mexico, 8 off of Alaska and, at the request of the Commonwealth of Virginia, one in the Mid-Atlantic Planning Area, about 50 miles off the coast of southern Virginia.

The Offshore Imperative, Shell Oil's Search for Petroleum in Postwar America

The day finished with a presentation by Dr. Tyler Priest, a Committee member and author of *The Offshore Imperative*, *Shell Oil's Search for Petroleum in Postwar America*. As the discovery and production of onshore oil in the United States faced an uncertain future after the Second

World War, the offshore frontier in the Gulf of Mexico beckoned. Shell Oil Company pioneered many of the early moves into the Gulf, and during the next 50 years the company led the industry every step of the way into deeper water. Dr. Priest's study for the first time tells the modern history of Shell Oil. Drawing on extensive interviews with Shell retirees and many other sources, Dr. Priest relates how the imagination, talent, and hard work of personnel at all levels shaped the evolution of the company and developed its offshore capabilities. Shell Oil's story is unique, but it also illuminates the contemporary history of the petroleum industry. This study provides essential historical context for understanding strategic decision-making, scientific research, management of technology, and corporate organization and culture within modern oil companies.

Wednesday, May 23

This day was spent reviewing regional draft Studies Development Plans. Following a brief charge from the Chair to the Discipline Breakout Groups, the groups went into their sessions (Ecology/Biology, Physical Oceanography, and Social Sciences) to consider proposed regional priorities and information needs. Each Discipline Breakout Group met with staff members from each MMS OCS Region and Headquarters. In each breakout session, a Committee member was designated as a discussion leader and an MMS staff member was assigned to take notes. The Regional MMS Studies Chiefs and staff members were asked to identify, justify, and discuss priorities for future environmental studies.

Thursday, May 24

Reports from each of the Discipline Breakout Group were presented in plenary session.

Peer-Review Update

In December of 2005, the Office of Management and Budget issued a bulletin that established formal government-wide standards for conducting peer review of influential scientific information. MMS takes peer review very seriously and applies it to critical projects right from the beginning. Members of the Committee are regularly involved in the peer review process. Ms. Elizabeth Burkhard's report covered the draft Departmental guidelines, the MMS team to develop identifying criteria for influential information, and current projects underway.

Committee Business

The Committee developed the following acknowledgments and recommendations for the Director of the MMS:

- The Committee unanimously expressed its overall high regard for the personnel and programs of MMS Headquarters and the MMS OCS Regions. They continue to appreciate the materials provided to them before the meeting, including the clear and concise responses to the recommendations made the previous year.
- The Committee commended MMS for significant progress on international work with Mexico. This cooperation strengthens ESP studies and increases the visibility of MMS contributions and their science value.

- The high level of communication within MMS, particularly at the regional level, has lead to solid cooperation and information flow. The Regions are to be commended in their continuing cooperative efforts.
- The Committee supports the effort MMS has spent on keeping its Internet site current and informative. This has positive results as the Internet is a critical portal for communicating with scientists, the public, and policy makers.
- The Gulf of Mexico Region deserves special recognition for the work its dedicated staff put in to recover so quickly after the 2005 hurricane season and maintain its high level of activity.
- Considering the prominence of social and economic issues related to all forms of energy production, the OCS SC could use more expertise in the field of economics.

As a result of this year's deliberations, the following recommendations emerged:

- 1. Data availability and archiving Continue work to make MMS data available via MMS web sites and links to data storage systems (e.g. National Oceanographic Data Center). This will require continual effort and innovation as the magnitude of data increases. However, it is also of great importance to allow integrated research across disciplines as ecosystem modeling and climate change become critical areas of investigation.
- 2. Collaborative funding Support for continued progress and success in collaborative funding across agencies (e.g. the National Oceanographic Partnership Program). It was also suggest that methods for match funding and cross funding with Agency-Industry programs be expanded. Explore innovative pathways for industry to contribute to research efforts.
- 3. Rapid response to alternative energy research needs Research in alternative energy is a nascent field and is driven by rapidly changing business opportunities and economics. The MMS research program has evolved to work best with oil and gas, which is a mature industry that does not move as quickly and does not have as many smaller entities trying to break into the area of energy production. The MMS research program needs a rapid response component to research concepts and permits in alternative energy in order to keep up with this field.
- 4. Ecosystem-based research and enhanced interactions between MMS Regions The MMS should continue to support and enhance ecosystem-based research approaches in order to better understand scientific issues in their geographical regions. Regions are moving in this direction and this needs to be supported, reinforced, and rewarded. It is important that MMS regional programs increase interactions with one another to enhance transferable research lessons, findings, and data.
- 5. Re-establish sand and gravel research program The Committee was concerned that while the regulatory aspects of permitting for sand and gravel continue, research oversight has been significantly reduced. Consequently, there is minimal cohesive and external review oversight of the environmental impacts of sand and gravel activities. This program should be returned to MMS ESP with adequate funding for its mission.

There is growing concern about the relationships of OCS activities and wetland submergence in the Gulf of Mexico Region. The Committee requests a focused presentation on this issue at its spring 2008 meeting. If this is an emerging issue that MMS will need to consider, a presentation will be important for that discussion.

Finally, Chair Diaz expressed the Committee's appreciation regarding MMS's support and use of OCS SC Subcommittees.

The meeting was adjourned at 12:00 noon.

(Expanded Proceedings will be posted when available.)



I certify that the above minutes are an accurate caption of the May 22-24, 2007, OCS Scientific Committee proceedings. The minutes may be released to OCS SC members and made available for public inspection.

Dr. Robert J Diaz

Chair, OCS Scientific Committee Minerals Management Service

ATTENDEES

OCS Scientific Committee Members

- Dr. Ralph Browning Brown, Brigham Young University
- Dr. Michael Castellini, University of Alaska Fairbanks
- Dr. James Coleman, Louisiana State University
- Dr. Robert Diaz, Virginia Institute of Marine Science
- Dr. D. Michael Fry, American Bird Conservatory
- Dr. Michael P. Kosro, Oregon State University
- Dr. Tyler Priest, University of Houston
- Dr. Michael Rex, University of Massachusetts
- Dr. Peter Paul Schweitzer, University of Alaska Fairbanks
- Dr. Joseph Smith, ExxonMobil Upstream Research
- Dr. John Trefry, Florida Institute of Technology

Minerals Management Service

- Dr. Tom Ahlfeld, Environmental Sciences Branch
- Mr. David Ball, Gulf of Mexico OCS Region
- Ms. Carolyn Beamer, Offshore Minerals Management
- Mr. Richard Bennett, Gulf of Mexico OCS Region
- Mr. Greg Boland, Environmental Sciences Section, Gulf of Mexico OCS Region
- Ms. Maureen Bornholdt, International Activities and Marine Minerals
- Ms. Donna Bourg, Gulf of Mexico OCS Region
- Ms. Elizabeth Burkhard, Environmental Sciences Branch
- Ms. Terrie Callahan, Procurement Division
- Mr. Robert Cameron, Gulf of Mexico OCS Region
- Mr. Dennis Chew, Gulf of Mexico OCS Region
- Mr. Joe Christopher, Gulf of Mexico OCS Region
- Mr. James Cimato, Environmental Sciences Branch
- Ms. Phyllis Clark, Environmental Sciences Branch
- Dr. Cleve Cowles, Alaska OCS Region
- Dr. Carole Current, Gulf of Mexico OCS Region
- Ms. Melanie Damour, Gulf of Mexico OCS Region
- Ms. Holli Ensz, Gulf of Mexico OCS Region
- Dr. Deborah Epperson, Gulf of Mexico OCS Region
- Mr. Gary Goeke, Gulf of Mexico OCS Region
- Mr. Greg Gould, Environmental Division
- Mr. Larry Hartzog, Gulf of Mexico OCS Region
- Ms. Mary Elaine Helix, Environmental Evaluation, Pacific OCS Region
- Mr. Tim Holder, Gulf of Mexico OCS Region
- Dr. Chester Huang, Gulf of Mexico OCS Region
- Ms. Cheri Hunter, Offshore Minerals Management
- Dr. Jack Irion, Gulf of Mexico OCS Region
- Ms. Bonnie Johnson, Gulf of Mexico OCS Region
- Mr. Robert LaBelle, Offshore Minerals Management

- Dr. Ron Lai, Environmental Sciences Branch
- Ms. Connie Landry, Gulf of Mexico OCS region
- Mr. Herb Leedy, Gulf of Mexico OCS Region
- Dr. Alexis Lugo-Fernandez, Environmental Sciences Section, Gulf of Mexico OCS Region
- Dr. Asha Luthra, Gulf of Mexico OCS Region
- Mr. Dave Moran, Gulf of Mexico OCS Region
- Dr. Margaret Metcalf, Gulf of Mexico OCS Region
- Dr. Charles Monnett, Environmental Studies Section, Alaska OCS Region
- Ms. Liz Peuler, Gulf of Mexico OCS Region
- Dr. Fred Piltz, Environmental Evaluation Pacific OCS Region
- Dr. Dick Prentki, Environmental Studies Section, Alaska OCS Region
- Ms. Carol Roden, Gulf of Mexico OCS Region
- Dr. Pat Roscigno, Environmental Sciences Section, Gulf of Mexico OCS Region
- Ms. Celest Rueffert, Procurement Division
- Mr. James Sinclair, Gulf of Mexico OCS Region
- Ms. Kristen Strellec, Gulf of Mexico OCS Region
- Ms. Debra Vigil, Gulf of Mexico OCS Region
- Ms. Lynnette Vesco, Environmental Evaluation, Pacific OCS Region
- Ms. Barbara Wallace, Environmental Sciences Branch
- Mr. Will Waskes, International Activities and Marine Minerals
- Ms. Kate Wedemeyer, Alaska OCS Region
- Dr. Dee Williams, Alaska OCS Region

Invitees

- Dr. Mark Benfield, University of Louisiana
- Mr. Victor Carrillo, OCS Policy Committee Chair
- Dr. Richard Condrey, University of Louisiana
- Dr. David Dismukes, University of Louisiana
- Dr. Byron Griffith, Environmental Protection Agency
- Dr. Chunyan Li, University of Louisiana
- Dr. Larry Rouse, University of Louisiana
- Dr. Gregory Stone, University of Louisiana

Others

- Ms. Hope Herron
- Mr. Joe Cancienne
- Mr. Paul Stang

Outer Continental Shelf (OCS) Scientific Committee Meeting May 22-24, 2007 New Orleans, Louisiana

Tuesday, May 22, 2007 Fleur De Lis Ballroom (2nd Floor)

8:00 a.m.	Welcome and Introductions	Dr. Robert Diaz, Chair Mr. James Cimato, MMS			
8:20 a.m.	MMS Director's Welcome, Presentation, and Discussion	Mr. Robert LaBelle, MMS			
8:45 a.m.	Gulf of Mexico OCS Region Update	Mr. Lars Herbst, MMS			
9:30 a.m.	Alternate Energy Update	Ms. Maureen Bornholdt, MMS			
	Subcommittee on Alternative and Renewable Energy	Dr. Michael Fry, Chair			
10:15 a.m. – 10:45 a.m. Break					
10:45 a.m.	Report from the last OCS Policy Committee Meeting	Dr. Victor G. Carrillo, Chair			
11:00 a.m.	Overview of the Gulf of Mexico Alliance	Dr. Byron Griffith, EPA			
11:30 a.m.	Efforts to workout collaborative programs in advance	Mr. James Cimato, MMS			
12:00 noon – 1:30 p.m. Lunch					
1:30 p.m.	Some Highlights of the MMS <i>Environmental Studies Program</i> and Our Goal for the Next Day-and-Half	Mr. James Cimato, MMS			
1:45 p.m.	Summary of Alaska Subcommittee Activities	Dr. Michael Castellini, Chair			
	Summary of Deepwater Subcommittee Activities	Dr. Joe Smith, Chair			
2:15 p.m.	MMS/LSU Coastal Marine Institute Update	Dr. Larry Rouse, Director			
3:00 p.m. – 3:15 p.m. Break					
3:15 p.m.	MMS/LSU Coastal Marine Institute Update (continued)	Dr. Larry Rouse, Director			
4:00 p.m.	Proposed Final Program Outer Continental Shelf Oil and Gas Leasing Program 2007-2012	Ms. Renee Orr, MMS			
4:30 p.m.	The Offshore Imperative, Shell Oil's Search for Petroleum in Postwar America	Dr. Tyler Priest, SC Member			
6:00 p.m.	Recess				

Outer Continental Shelf (OCS) Scientific Committee Meeting Wednesday, May 23, 2007 Marigny, Ursuline, &Fontainebleau Boardrooms (2nd Floor)

7:50 a.m,. – Charge to the Discipline **Dr. Robert Diaz**, Chair

8:00 a..m.. Subcommittees

Physical Sciences, Biology, and Socioeconomic Disciplines meet separately to discuss national and regional studies plans.

Marigny Ursuline

Fontainebleau

	Biology/Ecology or Interdisciplinary	Physical Sciences	Social Sciences		
8:00 a.m. – 9:30 a.m.	Pacific	OPEN ROOM	Gulf of Mexico		
9:30 a.m. – 10:00 a.m. BREAK					
10:00 a.m. – 12:00 p.m.	Alaska	Gulf of Mexico	Alaska		
12:00 p.m. – 1:30 p.m. LUNCH					
1:30 p.m. – 3:30 p.m.	Gulf of Mexico	Alaska	Gulf of Mexico & Alaska		
3:30 p.m. – 3:45 p.m. BREAK					
3:45 p.m. – 5:30 p.m.	Biology/Ecology Chairs and MMS Recorder Finalize Recommendations	Physical Sciences Chairs and MMS Recorder Finalize Recommendations	Social Sciences Chairs and MMS Recorder Finalize Recommendations		

Outer Continental Shelf (OCS) Scientific Committee Meeting Thursday, May 24, 2007 Fleur De Lis Ballroom (2nd Floor)

8:00 a.m.	Plenary Session Opening Comments	Dr. Robert Diaz, Chair
8:05 a.m.	Peer-Review Update	Ms. Elizabeth Burkhard, MMS
8:20 a.m.	 Discipline Subcommittee Reports (20 minutes each) Biology Physical Oceanography Socioeconomics Open Discussion of Subcommittee Reports 9:35 a.m. – 10:00 a.m. Break 	
10:00 a.m.	Open Discussion of Subcommittee Reports (continued)	
10:45 a.m.	Public Comment	
11:15 a.m.	 Committee Business Items for Letter to the Director Emerging Issues/Topics of Interest Other Business Dates and locations for the next meeting 	
12:00 noon	Adjourn	